AF

IN THE U.S. PATENT AND TRADEMARK OFFICE

Appl. No.:	10/043,926
Applicant:	Timo Rantalainen
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Examiner:	Doan, Kiet M.
Docket No.:	874.0103.U1(US)
Title:	METHOD AND APPARATUS FOR REDUCING PREMATURE TERMINATION OF MOBILE STATION LCS PROCEDURE DURING RR OPERATIONS

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APPELLANT'S APPEAL BRIEF-REVISED

Sir:

This Appeal Brief-Revised is in reply to the PTOL-462 dated January 25, 2007, and replaces the Appeal Brief dated October 24, 2006 which was filed further to the Notice of Appeal dated June 26, 2006. No additional fee is seen due, and the filing of this Appeal Brief-Revised is within the one-month shortened period to reply to the PTOL-462. Should the undersigned attorney be mistaken, please consider this a petition for an extension of time that may be required to avoid dismissal of this appeal, and debit Deposit Account No. 50-1924 as appropriate.

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(1) REAL PARTY IN INTEREST

The real party in interest Nokia Corporation of Espoo Finland, as indicated in an assignment of the U.S. application.

(2) RELATED APPEALS AND INTERFERENCES

There are no other pending appeals or interferences of which the undersigned representative and assignee/RPI is aware that will directly affect, be directly affected by or have a bearing on the Board's decision in this appeal.

(3) STATUS OF CLAIMS

Claims 1-29 are pending in this appeal and stand finally rejected. Claims 1-29 are reproduced in an Appendix accompanying this Brief as those claims stood finally rejected by a final Office Action dated January 24, 2006.

(4) STATUS OF AMENDMENTS

A Response under 37 C.F.R. §1.116 was submitted subsequent to the Final Rejection dated January 24, 2006. The Response Under 37 C.F.R. §1.116 was filed on April 24, 2006 and made arguments but no claim amendments.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

Reference may be had to Fig. 1 for this Summary. Independent claim 1 is directed to a method for operating a mobile station (100 in Fig. 1), in cooperation with a network operator, comprising upon an occurrence of a radio resources (RR) procedure, including handover (HO) and cell re-selection (CRS), (page 10, lines 10-11) that affects the mobile station, determining if a location procedure is ongoing in the mobile station (page 10, lines 11-13); and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller. (page 6, lines 5-6).

Independent claim 15 is directed to a wireless communications system having at least one mobile station (100 in Fig. 1) for communicating with a network operator, comprising a controller (180 in Fig. 1) in said mobile station, responsive to an occurrence of a RR procedure, including HO and CRS, (page 10, lines 10-11) that affects the mobile station, for determining if a location procedure is ongoing in the mobile station (page 10, lines 11-13) and, if it is, for completing the location procedure and for reporting measurement results in a message transmitted from the mobile station to a target radio network controller (page 6, lines 5-6).

Independent claim 29 is directed to a computer program product stored on a computer-readable medium and comprising program instructions for causing a data processor (180 in Fig. 1) to operate with a wireless network (5), comprising operations of responsive to an occurrence of a Radio Resources procedure comprising at least one of

Handover and Cell Re-selection (page 10, lines 10-11), and if a Location Services procedure has been started in a mobile station, completing the Location Services procedure, and sending result information regarding the completed Location Services procedure results to a target Radio Network Controller (page 10, lines 11-13 and page 6, lines 5-6).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the Office Action dated January 24, 2006, the Examiner cites 3 grounds of rejection as follows:

FIRST GROUNDS. Claims 1, 15 and 29 stand rejected under 35 U.S.C. § 103(a) as obvious over the combination of Demetrescu (US6,647,262) in view of Ida (2002/0082036).

SECOND GROUNDS. Claims 2-5, 7, 9-12, 16-18, 21, and 23-26 stand rejected under 35 U.S.C. § 103(a) as obvious over the combination of Demetrescu (US6,647,262) in view of Ida (2002/0082036), and in further view of Fried (US5,930,721).

THIRD GROUNDS. Claims 6, 8, 13-14, 20, 22, and 27-28 stand rejected under 35 U.S.C. § 103(a) as obvious over the combination of Demetrescu (US6,647,262) in view of Ida (2002/0082036), in view of Fried (US5,930,721), and in further view of Parmar (US6,725,039).

(7) ARGUMENT

The above three grounds for rejection are divided into seven distinct arguments. The first grounds of rejection are considered under Arguments A and B. Argument A concerns whether any combination of Demetrescu (6,647,262) with Ida et al. (2002/0082036) teaches or suggests, upon an occurrence of a RR procedure, determining if a location procedure is ongoing in the mobile station as recited in claims 1 and 15. Argument B concerns whether any combination of Demetrescu with Ida et al. teaches or suggests, if a location procedure is ongoing in the mobile station, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller as recited in claims 1, 15, and 29.

The second grounds for rejection are considered under Arguments C, D and E. Argument C concerns whether any combination of Demetrescu, Ida et al., and Fried et al. (5,930,721) teaches or suggests that the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation as recited in claims 2 and 16. Argument D concerns whether any combination of Demetrescu, Ida et al., and Fried et al. teaches or suggests sending LCS parameters from a source RNC/BSC to a target RNC/BSC as recited in claims 4, 7, 18, and 21. Argument E concerns whether any combination of Demetrescu, Ida et al., and Fried et al. teaches or suggests, where the LCS parameters comprise at least one of a requested location accuracy, a requested location response time, details pertaining to a currently ongoing location process, and a GMLC address as recited in claims 9-12 and 23-26.

The third grounds of rejection are considered under Arguments F and G. Argument F concerns whether any combination of Demetrescu, Ida et al., Fried et al., and Parmar (6,725,039 B1) teaches or suggests, wherein the message is sent before/after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC as recited in claims 13-14 and 27-28. Argument G concerns whether any combination of Demetrescu, Ida et al., Fried et al., and Parmar teaches or suggests, wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message as recited in claims 6 and 20.

RESPECTING THE FIRST GROUNDS OF REJECTION:

ARGUMENT A: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA, TEACH OR SUGGEST UPON AN OCCURRENCE OF A RR PROCEDURE, DETERMINING IF A LOCATION PROCEDURE IS ONGOING IN THE MOBILE STATION AS RECITED IN CLAIMS 1 AND 15?

Amongst the three criteria necessary to establish a *prima facie* case of obviousness, is the requirement that the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claim 1 recites:

> 1. A method for operating a mobile station in cooperation with a network operator, comprising:
>
> upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, determining if a location procedure is ongoing in the mobile station; and
>
> if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller.

With respect to claim 1, the Examiner asserted in the final Office Action that Demetrescu et al. teaches "determining if a location procedure is ongoing in the mobile station (C2, L1-24, L56-67, C3, L17-55, teach radio transmission in handover and selected cell wherein measurement are report back to network which means as determining if a location procedure is ongoing in the mobile station)."

In fact, Demetrescu et al. does not teach, at the Examiner's citations or elsewhere, determining if a location procedure is ongoing in the mobile station as claimed.

At C2, L1-24, L56-67, Demetrescu et al. discloses "a network having reporting means for causing the mobile station to take and report back measurements on a given list

of cells" and "This flexibility allows the network to indicate which measurements it requires the mobile station (MS) to make (Packet Measurement Order), for the mobile station to report these measurements to the network (Packet Measurement Report) and to force the mobile station to reselect a given cell (Packet Cell Change Order)". At C3, L17-55, Demetrescu et al. discloses "In order for pseudo GSM handovers to take place, the mobile station must report measurements back to the network. ... In NC2 (NC3) the mobile station is instructed to take and report measurements on a given list of cells. The natural choice of measurements to take would be those currently taken by a GSM mobile station in order to perform handover measurements." It is further disclosed that:

> The mobile reports back measurements to the network. The network then decides that a handover should take place for the given mobile based on network specific handover criteria. Or alternatively the mobile decides on local criteria that a handover is required. This alternative is in keeping with GPRS/EGPRS mobile station autonomy in cell reselection. When the mobile decides that a handover is required, it signals this by sending a Packet Cell Change Request message.

As is evident, there is no mention, at the Examiner's citations, of determining if a location procedure is ongoing upon an occurrence of a RR procedure. In fact, there is no mention of a location procedure. A text search of Demetrescu et al. similarly reveals no instances of the word "location", "position", or other verbiage indicative of geographic location.

Turning now to the teachings of Ida et al., the Examiner respectfully disagreed with the Applicant's previous response while asserting that Ida et al. teach "determining if a location procedure is on going in the mobile station (Examiner further cited Paragraphs [0053], [0057], teach mobile station moves and change it present location means as location procedure is on going in the mobile station and Fig. 1, No. 11, illustrate location

generating means as determining location procedure." Applicants respectfully assert that neither paragraph [0053], [0057], nor Fig. 1, No. 11 teach "determining if a location procedure is ongoing in the mobile station" as recited in claim 1.

Paragraph [0057] states:

> The mobile station location information generating means 11, when provided in a mobile station, **transmits location information of the mobile station measured by the mobile station to a base transceiver station in communication with it when the quality of the signal received from the base transceiver station in communication with it falls below a predetermined quality**. For example, when the quality (for example, received field strength) of a signal received from a base transceiver station in communication with it is below a predetermined quality (for example, level), which is a condition for transmission of a signal reporting the received field strengths of signals received from the base transceiver station in communication with it and another base transceiver station adjoining that base transceiver station and triggering the conditional start of handover, **the means transmits the location information of that mobile station measured by that mobile station to the base transceiver station in communication with it**. Alternatively, this is when a quality above that predetermined quality (for example, a level of that level plus a predetermined level) is not reached. (emphasis added).

As is clearly evident, Ida et al. disclose transmitting location information from a mobile station to a base transceiver station when a received signal quality is sufficiently low so as to trigger the start of handover. There is no disclosure of determining if a location procedure is ongoing in the mobile station upon an occurrence of a RR procedure.

As neither Demetrescu nor Ida et al. individually teach determining if a location procedure is ongoing in the mobile station upon an occurrence of a RR procedure, their combination, such a combination neither suggested nor deemed appropriate, likewise fails to teach this element. For this reason alone, the rejection of claim 1 must be withdrawn.

As claim 15 likewise recites "determining if a location procedure is ongoing in the mobile station", the rejection of claim 15 must likewise be withdrawn.

ARGUMENT B: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA, TEACH OR SUGGEST IF A LOCATION PROCEDURE IS ONGOING IN THE MOBILE STATION, COMPLETING THE LOCATION PROCEDURE AND REPORTING MEASUREMENT RESULTS IN A MESSAGE FROM THE MOBILE STATION TO A TARGET RADIO NETWORK CONTROLLER AS RECITED IN CLAIMS 1, 15, AND 29?

With respect to claim 1, the Examiner asserted in the final Office Action that "Demetrescu et al. teaches the limitation as discuss but fail to teach and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller." The Examiner further asserted that Ida et al. teach "and if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a **target radio network controller**." (emphasis added).

With respect to claim 1, Applicant respectfully replies that, contrary to the Examiner's assertions, Ida et al. do not teach a target network controller and, hence, do not teach reporting measurement results in a message from the mobile station to a target network radio controller as recited in claim 1.

The Examiner cited paragraphs [0025-0027], [0089-0090], and [0053,0057] as teaching "reporting measurement results in a message from the mobile station to a target radio network controller" and further cited Fig. 16, No. 4. In fact, Ida et al. state, at paragraphs [0025-0027]:

[0025] a requesting means for transmitting a request for raising the transmission power at the time of handoff and

[0026] a mobile station location information generating means for measuring the position of the mobile station and transmitting the measured location information to a communicating base transceiver station before transmitting the request when the quality of the received signal from the communicating base transceiver station falls below a predetermined quality.

[0027] Note that regarding the "predetermined quality", when the quality (for example, received field strength) of a signal received from a base transceiver station in communication with it is below a predetermined quality (for example, level), which is a condition for transmission of a signal reporting the received field strengths of signals received from the base transceiver station in communication with it and another base transceiver station adjoining that base transceiver station and triggering the conditional start of handover, the mobile station transmits the measured location information of that mobile station to the base transceiver station in communication with it. Alternatively, this is when a quality above that predetermined quality (for example, a level of that level plus a predetermined level) is not reached.

Ida et al. further state, at paragraphs [0089-0090]

[0089] Note that **the mobile station location information is transmitted to the base transceiver station in communication with the mobile station when the quality of the signal received from the base transceiver station in communication with the mobile station falls below a predetermined quality**. That is, the mobile station location information generating unit 21 is provided with a quality decision function for detecting the quality of the signal received from at least the base transceiver station in communication with the mobile station, comparing this with a predetermined quality, and deciding if that quality has fallen below that predetermined quality. For example, when the quality (for example, received field strength) of a signal received from a base transceiver station in communication with it is below a predetermined quality (for example, level), which is a condition for transmission of a signal reporting the received field strengths of signals received from the base transceiver station in communication with it and another base transceiver station adjoining that base transceiver station and **triggering the conditional start of handover, the mobile station transmits the location information thereof measured by itself to the base transceiver station in communication with it**. Alternatively, this is when a quality above that predetermined quality (for example, a level of that level plus a predetermined level) is not reached.

[0090] Note that **the location of the mobile station is preferably measured when the quality of the signal received from the base transceiver station in communication with it falls below a predetermined quality (detected by quality decision function), but it may also be measured periodically** (by providing a clock function for counting a predetermined time interval using a counter etc. and measuring the location at a timing given by that clock function). Note that **during handover, the location is preferably measured periodically** (similarly using the clock function). Further, **after the end of handover** (after the transmission of the same data from a plurality of base transceiver stations to one mobile station ends), **it is preferably again to measure it periodically** (similarly using the clock function) or measure it only when the quality of the signal received from the base transceiver station in communication with the mobile station falls below a predetermined quality (similarly using the clock function). On the other hand, **for transmission of the location information as well, the measured location information is preferably transmitted periodically during handover (similarly using the clock function) or transmitted in accordance with a change of the location of the mobile station such as when detecting movement by a predetermined distance based on the measured position (by providing the mobile station location information generating means with a movement distance computing function for finding by computation that a distance between the location measured at a certain point of time and a position measured later exceeds a predetermined distance and transmitting the information when detecting that the predetermined distance has been exceeded by the computation) or when the mobile station has moved by a predetermined distance in a predetermined time (by providing the mobile station location information generating means with a movement speed computing function for finding by computation the distance of movement of the mobile station per unit time based on the positions measured at different points of time and detecting when the distance of movement per unit time exceeds a predetermined distance and transmitting the information when detecting that the movement exceeds the predetermined distance)**. Further, after the end of handover (after transmission of the same data from a plurality of base transceiver stations to a single mobile station ends), the information is preferably periodically transmitted (similarly using the clock function) or transmitted only when the quality of the signal received from the base transceiver station in communication with the mobile station falls below a predetermined quality (similarly using the quality decision function).

As is evident, these paragraphs do not disclose communication with a target radio network controller. Likewise, paragraphs [0053,0057] fail to teach the above noted element. In contrast, claim 1 recites reporting measurement results to a target radio

network controller. It is noted that Fig. 16, No. 4 is described as a "base transceiver station control apparatus (RNC)". However, Ida et al. do not disclose a target radio network controller. As Ida et al. teach at paragraph [0053] (describing Fig. 16):

> When however the mobile station moves and changes its present location and, as in the case of the illustrated mobile station 3, enters a region 5 where it can communicate with both the base transceiver station (B) 2 and the base transceiver station (C) 2, the radio channel with the base transceiver station currently used by the mobile station 3 has to be switched from the base transceiver station A to the base transceiver station B or from the base transceiver station A to the base transceiver station C. This switching is mainly determined by the base transceiver station host equipment 4 in accordance with the magnitude of the levels of reception of the signals from the base transceiver stations 2 at the mobile station 3. **At the time of switching, the same data is transmitted from the base transceiver station (A, B (or A, C) etc) to the same mobile station. This state is called "handover".** In particular, in a CDMA system, "soft handover" where there is no break in the sound during conversation is possible. **The present invention relates to** control of the downlink transmission power to a mobile station at the base transceiver stations in the middle of **such handover**.

As is evident based on the totality of the description of Ida et al., what they teach is an intra-RNC handover. As a result, Ida et al. teach neither a source RNC nor a target RNC. As a result, Ida et al. fail to disclose the recited element "target network controller." For this reason alone, the rejection of claim 1 must be withdrawn. Claim 15 likewise recites "reporting measurement results in a message transmitted from the mobile station to a target radio network controller" and claim 29 recites "sending result information regarding the completed Location Services procedure results to a target Radio Network Controller". For the reasons discussed above, the rejections of claims 15 and 29 must likewise be withdrawn.

Applicants further note that in the Advisory Action of May 19, 2006, the Examiner made no mention of or reference to the previously submitted argument presented above. Instead, the Examiner once again repeated, verbatim, (albeit with different citations) the previous assertion that Ida et al. disclose "completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller (Paragraphs [0026-0027, 0058]" Applicants respectfully assert that the Ida et al. do not teach at the above citations, or elsewhere, reporting measurement results in a message from the mobile station to a target network radio controller as recited in claim 1. Once again, for this reason alone, the rejections of claims 1, 15, and 29 must be withdrawn.

RESPECTING THE SECOND GROUNDS OF REJECTION:

ARGUMENT C: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA AND FRIED, TEACH OR SUGGEST WHEREIN THE LOCATION PROCEDURE IS EXECUTED DURING A COMBINED HARD HANDOVER AND SRNS RELOCATION PROCEDURE FOR AT LEAST ONE OF A PS OR A CS DOMAIN, AND APPLIES TO BOTH INTRA-SGSN/MSC SRNS RELOCATION AND INTER-SGSN/MSC AND SRNS RELOCATION AS RECITED IN CLAIMS 2 AND 16?

With respect to claim 2, the Examiner asserted in the final Office Action that Demetrescu et al. and Ida et al. fail to teach "wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation." The Examiner further cited the Abstract and col. 5, lines 25-44 of Fried as teaching that a "location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS."

Fried et al. teach, generally, emulating locating functions of a circuit switched system in a packet switched mobile terminal. At the Examiner's citation of col. 5, lines 25-44, Fried et al. state:

> Specifically, returning to the illustrative embodiment in FIG. 1, the packet switched mobile stations (20) are responsible for cell selection and reselection for their packet transmissions. The network (12) broadcasts a control message (or series of messages), in accordance with a standard network-to-mobile control message protocol, to the packet switched mobile stations (20) via the packet switched base station/transceiver unit (16). The control message includes the same information utilized by the locating algorithms in the circuit switched system (14, 18). the algorithms executed in the packet switched mobile stations (20) are capable of generating and utilizing all of the metrics (measurements) normally utilized by the locating algorithms in the circuit switched mobile system, whenever the packet switched mobile terminals (20) assess the candidacy

> of neighboring cells for the cell reselection process. As such, the present invention allows the cell reselection algorithms in the packet switched mobile stations to emulate the locating algorithms used in the circuit switched system.

Based on the preceding, assuming, arguendo, that the cell selection of Fried et al. is interpreted as the claimed Hard Handover, there is no teaching of the "Combined Hard Handover and SRNS Relocation procedure" recited in claim 1. There is further no teaching that the location procedure "applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS" as claimed. As a result, the combination of Fried et al. with the teachings of Demetrescu et al. and Ida et al., such a combination neither suggested nor deemed appropriate, fails to teach these elements of claims 2 and 16. As a result, the rejections of claims 2 and 16 must be withdrawn. It is further noted by the Applicant that the teachings of Fried et al. does not cure the deficiencies in the teachings of Demetrescu et al. and Ida et al. discussed above.

ARGUMENT D: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA AND FRIED, TEACH OR SUGGEST SENDING LCS PARAMETERS FROM A SOURCE RNC/BSC TO A TARGET RNC/BSC AS RECITED IN CLAIMS 4, 7, 18, AND 21?

Claim 4 recites:

> 4. A method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC.

With respect to claims 4, 7, 18, and 21, the Examiner cited Ida et al. as teaching "(Fig. 16, Illustrate No. 4 as source RNC/BSC and No. 2 as target RNC/BSC)." Applicant respectfully asserts that Ida et al. teach no such thing. In fact, in Fig. 16, reference number "4" is described as a "base transceiver station host equipment" while all of reference numbers "2" are base transceiver stations each forming a radio communication zone. As

is evident, contrary to the Examiner's assertions, none of base transceiver stations are target RNC/BSCs. For this reason alone, the rejection of claim 4 must be withdrawn. As all of claims 7, 18, and 21 recite similar language, their rejections must also be withdrawn.

ARGUMENT E: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA AND FRIED, TEACH OR SUGGEST WHERE THE LCS PARAMETERS COMPRISE AT LEAST ONE OF A REQUESTED LOCATION ACCURACY, A REQUESTED LOCATION RESPONSE TIME, DETAILS PERTAINING TO A CURRENTLY ONGOING LOCATION PROCESS, AND A GMLC ADDRESS AS RECITED IN CLAIMS 9-12 AND 23-26.

Claim 9 recites:

> 9. A method as in claim 5, where the LCS parameters comprise at least one of:
> a requested location accuracy;
> a requested location response time;
> details pertaining to a currently ongoing location process; and
> a GMLC address.

With respect to claims 9-12 and 23-26, the Examiner asserted in the final Office Action that Ida teaches "where the LCS parameters comprise at least one of a requested location accuracy, a requested location response time, details pertaining to a currently ongoing location process, and a GMLC address (Page 1, Paragraph [0010], Page 5, Paragraphs [0089-0090]).

In fact, at paragraph [0010], Ida teaches:

> [0010] To attain the above object, the mobile communications system of the present invention is provided with a mobile station location information generating means (11) for generating location information indicating a present location of a mobile station (3) when transmitting a request for increasing the transmission power from the mobile station (3)

> in the middle of handover with base transceiver stations (2), a base transceiver station location information generating means (12) for generating location information indicating a present location of the base transceiver stations (2), a base transceiver station specifying means (13) for specifying one base transceiver station nearest to the mobile station (3) from said location information, and a transmission power control means (14) for instructing an increase of the transmission power in only the specified base transceiver station. Due to this, it is possible to keep down the overall amount of power emitted in the mobile communications system.

Paragraphs [0089-0090] are reproduced above. As is evident from these citations, Ida et al. teaches, generally, determining a present location of a mobile station and transmitting the location information to a base transceiver station. However, contrary to the Examiner's assertions, Ida et al. do not teach LCS parameters comprising (1) a requested location accuracy, (2) a requested location response time, (3) details pertaining to a currently ongoing location process, or (4) a GMLC address as claimed. In addition, it is explicitly recited that the aforementioned parameters are LCS parameters. Applicant notes that the LCS parameters are claimed as being sent "from a source RNC/BSC to a target RNC/BSC." As noted above, Ida et al. nowhere discloses a target RNC. For all of these reasons, the rejections of claim 9 must be withdrawn. As all of claims 10-12 and 23-26 likewise recite the elements discussed above with reference to claim 9, their rejections must likewise be withdrawn.

RESPECTING THE THIRD GROUNDS OF REJECTION:

ARGUMENT F: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA AND FRIED, TEACH OR SUGGEST WHEREIN THE MESSAGE IS SENT BEFORE/AFTER SENDING A UTRAN MOBILITY INFORMATION CONFIRM MESSAGE FROM THE MOBILE STATION TO THE TARGET RNC/BSC AS RECITED IN CLAIMS 13-14 AND 27-28?

Claim 13 recites:

> 13. A method as in claim 1, wherein the message is sent before sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

With respect to claim 13-14 and 27-28, the Examiner asserted in the final Office Action that Parmar teaches "wherein the message is sent before/after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC (C1, L41-64, C3, L14-32).

In fact, Parmer nowhere teaches, at the Examiner's citations or elsewhere, sending a "UTRAN Mobility Information Confirm message" as claimed. An electronic search of Parmar confirms that Parmar nowhere discloses this element. For this reason alone, the rejection of claim 13 must be withdrawn. As claims 14 and 27-28 recite language similar to that discussed with reference to claim 13, their rejections must likewise be withdrawn.

ARGUMENT G: DOES DEMETRESCU, ALONE OR IN COMBINATION WITH IDA, FRIED, OR PARMAR, TEACH OR SUGGEST WHEREIN FOR A UTRAN CASE THE LCS PARAMETERS ARE SENT IN A SOURCE RNC TO TARGET RNC TRANSPARENT CONTAINER IN A RELOCATION REQUIRED MESSAGE AS RECITED IN CLAIMS 6 AND 20?

With regards to claims 6 and 20, the Examiner allowed that Demetrescu, Ida, and Fried fail to teach "wherein for a UTRAN case the LCS parameters are sent in a Source

RNC to Target RNC Transparent Container in a Relocation Required message" while further asserting that Parmar teaches this element at C1, L42-59 and Fig. 1. Applicants respectfully note that Parmar nowhere makes any mention of a Relocation Required message as recited in claims 6 and 20. For this reason alone, the rejections of claims 6 and 20 must be withdrawn.

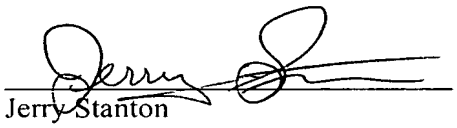
It is further noted that the Examiner rejected claims 8 and 22 citing Parmar at C3, L14-32 as teaching "sending LCS parameters to the target RNC in a Forward SRNS Context message. Applicants note that claims 8 and 22 depend upon claims 1 and 15, both of which must have their rejections withdrawn. As the teachings of Parmar do not cure the deficiencies in the rejections of claim 1 and 15, the rejections of claims 8 and 22 must likewise be withdrawn.

CONCLUSION

For at least the above reasons, the Applicant/Appellant contends that all of independent claims 1, 15 and 29 are patentable over Demetrescu et al. and Ida et al., alone or in combination. As all of claims 2-14 and 16-28 are dependent upon claims 1, 15 and 29, they are likewise patentable. The Applicant/Appellant respectfully requests the Board reverse the final rejection in the Office Action of January 24, 2006, and further that the Board rule that the pending claims are patentable over the cited art.

Respectfully submitted:

HARRINGTON & SMITH, PC



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(8) CLAIMS APPENDIX

1. (Original) A method for operating a mobile station in cooperation with a network operator, comprising:

upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, determining if a location procedure is ongoing in the mobile station; and

if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller.

2. (Original) A method as in claim 1, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation.

3. (Original) A method as in claim 1, wherein the location procedure is executed during a Combined Cell/URA/GRA Update and SRNS Relocation procedure for a PS domain, and applies to both intra-SGSN SRNS relocation and for inter-SGSN SRNS relocation

4. (Original) A method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC.

5. (Original) A method as in claim 4, wherein the LCS parameters are sent in a transparent manner.

6. (Original) A method as in claim 4, wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message.

7. (Original) A method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC in a Relocation Commit message.

8. (Original) A method as in claim 1, further comprising sending LCS parameters to the target RNC in a Forward SRNS Context message.

9. (Original) A method as in claim 5, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

10. (Original) A method as in claim 6, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

11. (Original) A method as in claim 7, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

12. (Original) A method as in claim 8, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

13. (Original) A method as in claim 1, wherein the message is sent before sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

14. (Original) A method as in claim 1, wherein the message is sent after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

15. (Original) A wireless communications system having at least one mobile station for communicating with a network operator, comprising a controller in said mobile station, responsive to an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, for determining if a location procedure is ongoing in the mobile station and, if it is, for completing the location procedure and for reporting measurement results in a message transmitted from the mobile station to a target radio network controller.

16. (Original) A system as in claim 15, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation.

17. (Original) A system as in claim 15, wherein the location procedure is executed during a Combined Cell/URA/GRA Update and SRNS Relocation procedure for a PS domain, and applies to both intra-SGSN SRNS relocation and for inter-SGSN SRNS relocation

18. (Original) A system as in claim 15, where the system sends LCS parameters from a source RNC/BSC to a target RNC/BSC.

19. (Original) A system as in claim 18, wherein the system sends LCS parameters in a transparent manner.

20. (Original) A system as in claim 18, wherein for a UTRAN case the system sends LCS parameters in a Source RNC to Target RNC Transparent Container in a Relocation Required message.

21. (Original) A system as in claim 15, where the system sends LCS parameters from a source RNC/BSC to a target RNC/BSC in a Relocation Commit message.

22. (Original) A system as in claim 15, where LCS parameters are sent to a target RNC/BSC in a Forward SRNS Context message.

23. (Original) A system as in claim 19, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

24. (Original) A system as in claim 20, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

25. (Original) A system as in claim 21, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

26. (Original) A system as in claim 22, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

27. (Original) A system as in claim 15, where the message is transmitted before transmitting a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

28. (Original) A system as in claim 15, where the message is transmitted after transmitting a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

29. (Previously Presented) A computer program product stored on a computer-readable medium and comprising program instructions for causing a data processor to operate with a wireless network, comprising operations of:

responsive to an occurrence of a Radio Resources procedure comprising at least one of Handover and Cell Re-selection, and if a Location Services procedure has been started in a mobile station, completing the Location Services procedure; and

sending result information regarding the completed Location Services procedure results to a target Radio Network Controller.

END OF CLAIMS

(9) EVIDENCE APPENDIX

Attached hereto please find copies of the following patents and published applications, relied upon by the Examiner in asserting the rejections:

US Patent No. 6,647,262 (Demetrescu);

US Patent Publication No. 2002/0082036 (Ida);

US Patent No. 5,930,721 (Fried); and

US Patent No. 6,725,039 (Parmar).

(10) RELATED PROCEEDING APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 C.F.R. §41.37.